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TECHNICAL INFORMATION

ENZYME SYSTEMS PRODUCTS
a division of

Technical Data Sheet

Method for Assay of BOC-Asp(OMe)-FMK Inhibitor, Boc-D(OMe)-FMK, A general Caspase Inhibitor / Apoptosis Inhibitor

The novel Boc-D(OMe)-FMK inhibitor **synthesized using proprietary technology** is cell permeable and irreversibly binds to activated Caspases to block apoptosis. Apoptosis is a physiological form of cell death, which plays important role in embryogenesis, cellular homoestasis, tisue atrophy, and removal damaged and mutated cells. Caspases, which act as molecular chainsaw are the central components of apoptosis response. Caspases are cysteine proteases that cleave after aspartate residue in their substrates. At least 7 of 14 known mammalian caspases have important role in apoptosis.
Method:

1.Dissolve 1mg of BOC-Asp(OMe)-FMK in:

– 190 µl DMSO = 20 mM
– 381 µl DMSO = 10 mM
– 762 µl DMSO = 5 mM, etc.

NOTE: These solutions may be stored at 4° C for several months. Solid BOC-Asp(OMe)-FMK may be stored desiccated at room temperature.

2.Add 2 µl of above stock solutions to 1ml of culture medium containing cells to give final DMSO concentration of 0.2%. Levels of DMSO above this may cause some cellular toxicity thus masking the effect of the ICE-protease inhibitor 2 µl of BOC-Asp(OMe)-FMK. 10 mM stock solution in 1ml medium = 20 mM final concentration.

NOTE: For in-vivo experiments extending for 12 to 48 hours, fresh inhibitor may have to be added (injected) due to inactivation by reaction with cysteine proteases.

PLEASE NOTE: This inhibitor is designed as a methyl ester to facilitate cell permeability. If the intended use is on purified or recombinant enzymes, esterase should be added to generate the free carboxyl groups. Please contact us for more details.
MP Biomedicals / Enzyme Systems Products, the innovator of Z-VAD(OMe)-FMK is the only company to manufacture optically pure and hence the most potent Fluoromethyl Ketones (FMK), the Apoptosis / Caspase Inhibitors. MP Biomedicals was the first company to Research and Manufacture the Fluoromethyl ketones. These compounds have been proven effective both in *vivo and in vitro* studies. We provide the most variety of Fluoromethyl Ketones. Caspase Inhibitor

Catalog Number	Description	Target
FK009	Z-VAD(OMe)-FMK	General
FK109	Z-VAD-FMK	General
FK010	Z-D(OMe)E(OMe)VD(OMe)-FMK	Caspase 3,7
FK011	BOC-Asp(OMe)-FMK	General
FK012	Z-IE(OMe)TD(OMe)-FMK	Caspase 8

FK013	Z-YVAD(OMe)-FMK	Caspase 1,4
FK014	Biotin-VAD(OMe)-FMK	Probe/ General
FK015	Z-VE(OMe)ID(OMe)-FMK	Caspase 6
FK016	Z-VD(OMe)VAD(OMe)-FMK	Caspase 2
FK017	Z-LLY-FMK	Calpain
FK018	Mu-Val-HPh-FMK	Calpain
FK019	Biotin-D(OMe)E(OMe)VD(OMe)-FMK	Probe/Caspase 3,7
FK020	Z-LLL-FMK	Proteosomes
FK021	Z-WE(OMe)HD(OMe)-FMK	Caspase 1,5
FK022	Z-LE(OMe)HD(OMe)-FMK	Caspase 9
FK023	Z-LE(OMe)TD(OMe)-FMK	Caspase 8
FK024	Mu-Phe-HPh-FMK	Cathepsin B,L
FK025	Z-D(OMe)QMD(OMe)-FMK	Caspase 3, 7
FK026	Z-LE(OMe)VD(OMe)-FMK	Caspase 4
FK027	Z-VK(Biotin)D(OMe)-FMK	General
FK028	Z-FF-FMK	Cathepsin B,L
FK029	Z-FA-FMK	Negative control
FK029C	Biotin-FA-FMK	Cathepsin B,L
FK030	Z-LE(OMe)E(OMe)D(OMe)-FMK	Caspase 13
FK031	Z-ASTD(OMe)-FMK	EMAP-11
FK032	FITC-VAD(OMe)-FMK	Probe/ General
FK033	Z-AE(OMe)VD(OMe)-FMK	Caspase 10
FK034	FAM-VAD(OMe)-FMK	Probe/ General
FK040	Mu-Leu-HPh-FMK	Cathepsin K
FK047	Z-D(OMe)NLD(OMe)-FMK	General 3,6
FK048	Z-ATAD(OMe)-FMK	Caspase 12

New Caspase, Apoptosis Inhibitors in Q-OPH series to target specific caspases

Catalog number	Description	Target
OPH029	Q-FA-OPH	Negative control
OPH011	Q-D(OMe)-OPH	General
OPH101	Z-VD-OPH	General
OPH016	Q-VD(OMe)VAD(OMe)-OPH	Caspase 2

OPH010	Q-D(OMe)E(OMe)VD(OMe)-OPH	Caspase 3,7
OPH012	Q-IE(OMe)TD(OMe)-OPH	Caspase 8
OPH022	Q-LE(OMe)HD(OMe)-OPH	Caspase 9
OPH033	Q-AE(OMe)VD(OMe)-OPH	Caspase 10
OPH048	Q-ATAD(OMe)-OPH	Caspase 12
OPH014	Biotin-VAD(OMe)-OPH	Probe/ General
OPH034	FAM-VAD(OMe)-OPH	Probe/ General to measure caspase activity